

1951

File No. GJK 1551

A CLASS

P.W. DEPARTMENT

K. BRANCH

Subject:—

Jog Javer.

Utilisation of — in the
Southern area of Bombay State

ALKJ 1951

Y

File No. GJK 1551-K

DOCKET SHEET (B)

File No. _____

DEPT.

BRANCH.

References :—

for previous ph. pt. see

~~2004/36 XIV~~

Date.	To whom sent.	Notes and instructions.

Below U.O.R. P.W.D.No.2004/36/14991 dated 24-3-51, regarding the Project Report for the Jog Karnatak Electric Grid Scheme.

ELECTRIC GRID OFFICES.

1. The percentage charges adopted in the estimates as noted in page 22 of the Project Report are similar to those adopted for the estimates of the North and South Gujarat Electric Grid schemes, which have already been approved by Government. The percentage charges ~~adopted~~ for work charged establishment and contingencies are made at 2% and 5% respectively, which are similar to those adopted for works of the P.W.D. (vide para 90, Note 1 and para 147 of P.W.D. Manual Vol. I). A substantial part of expenditure on schemes of this Department consists of cost of plant and material purchased from abroad. Establishment and other ancillary expense to put this plant in commission will be very much less than if all the expenditure were incurred on the kind of works ~~now~~ executed by P.W.D. Provision of $1\frac{1}{2}$ % in the estimates for Tools and Plant is considered sufficient for a scheme of this character and magnitude. This percentage is contemplated by Government vide remarks against item No.22 of the Accompaniment to G.R.No.7524/36 of 7-2-46 re: delegation of Financial Powers to officers of Electric Grid. The provision of $8\frac{1}{2}$ % for Establishment, Head office and General charges is made up of 5% for Establishment, $2\frac{1}{2}$ % for Head office, Engineering, Supervision, inspection etc. and 1 % for general charges. As the Jog Scheme itself is costing over rupees two crores and since other similar schemes are also undertaken simultaneously by this Dept., the provision of $2\frac{1}{2}$ % for Head Office establishment and secretariat charges and 1 % of the total cost of works for general charges towards the C.P.F., Audit and accounts charges are considered sufficient. To appreciate the relative significance of these figures it may be stated that a similar order for substation equipment for Jog Scheme has amounted to over Rs.45 lakhs of rupees and the work is not equal to

what .

What would be involved in Rs. 10 lakhs of expenditure on site works. As for the capitalisation of abatement of land revenue on the area occupied by the works, it may be noted that the plots selected for the works are scattered and small in area varying from about 2 to 8 acres each and are mostly within or just outside the municipal limits and if at all only dry crops can be cultivated on these plots. The revenue lost by Government on these plots is negligible compared with the revenue earned from the scheme and hence this charge is not taken into account, in this or any of the previous Transmission and Distribution schemes. This item becomes of importance where large areas have to be acquired for reservoirs, canals etc,

2. The rate of interest adopted for this scheme is the same as for the North and South Gujarat Schemes, while the rates for depreciation and operation and maintenance are calculated separately for the scheme (vide statements V & VI of the Project Report) as desired in G.I.P.W.D. No.2004/36-V-MI dated 29-7-49. The charges for operation and Maintenance include the contribution by the Government to the Provident Fund of the Operation and Maintenance Staff.

3. The rates for power supply to different types of consumers in the Jog-Hubli section are higher (and not lower as noted by the Finance Dept.) than those proposed in the Fourth Note while the rates for the Harihar-Haveri section are slightly lower. The major bulk of the power demand is in the Jog-Hubli section and the rates for Harihar-Hubli section are slightly reduced in order to keep a uniform rate for the whole scheme notwithstanding the appreciable difference in the bulk rates at Jog and Harihar. Hence the question of subsidy to new industries in the area on account of electricity duty may have to be considered particularly in view of the remarks of the secretary, Development Department (p. 10 ante)

Incidentally it may be noted with ref. to para 6

of ...

Slip P-112
below

of the F.D.'s note, that only about Rs.30,000 could be spent on the scheme in 1950-51 as the American manufacturers with whom order for substation equipment has been placed, did not ask for advance payment as the British manufacturers are doing. However, the provision of Rs.45,05,400 for 1951-52 may not be sufficient and is likely to increase to about Rs.81.13 lakhs as a major portion of the payment towards the materials and equipment ordered will have to be made in 1951-52. In this connection reference is invited to paras 1 and 6 of the Note sent with this office u.o.r. No.T.8/1/7690 dated 17.3.51.

T. J. *Richardson*
13.4.51.

The Secretary to Govt.,
Public Works Department,
Bombay.

U.O.R.No.T.8/1/7690
Bombay 1: 13.4.51, 1951.

isb/12.5.

with 2-14/4
EC (D) 14/4
G.J.K 1551
32829
14/4 (7) 14/4
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P.W.D.K.P.

Submitted with refce. to the D.D. note at
pp 10-12 ante.

2. The C.E., Bombay Elec. Grids' remarks at
pp 15-17 ante cover all the points raised
in the D.D. note. He has explained why
certain percentages, lower than those
prescribed in the P.W.D. Manual, have
been adopted in case of electricity schemes
of greater magnitude. The same percentages
have been adopted in case of North &
South Gujarat Elec. Grid Schemes and they
appear to be quite reasonable.

3. As regards ^{sub-P-1} para ^{P-} of para 3 of the D.D.
note the staff is to get the benefits of contri-
-butionary Provident Fund and the ~~charges~~ ^{con-}
-tribution to that fund is included
in the charges for operation and maintenance.

No provision has been made in this
Scheme for capitalisation of abatement of
land revenue on area occupied by the
works as no large areas are to be
acquired in case of such transmission
and distribution schemes and the
revenue lost by Govt. on account of
the

the plots selected for works is negligible.
The audit and accounts charges
have also been provided for vide A
of the C.E.'s note at p-15 ante.

4. As regards the interest charges the rate
adopted in case of North and South Gujarat
Scheme has been adopted in this case
also. The rates for depreciation and operation
and maintenance have been calculated
by the C.E., separately for this scheme.

5 With refer. to the F.D. observation, that
there is no case, prima facie, for considering
the question reg. subsidy to new industries,
please see the C.E.'s remarks in para
3 of his note. The rate for power supply
to new industries may have to be
decided later and a subsidy if any,
may have to be granted.

6. The C.E. has pointed out that the
provision of Rs. 45,05,400 made for
this ~~work~~ ^{scheme} in the current year's budget
may not be ^{p-17} sufficient and may have
to be increased to Rs. 81.13 lakhs. He
has however recently stated separately
that an additional amount of Rs 24.
laks is neeq. for this scheme during
the current year. The question of
providing that addl. amount is being
dealt

dealt in file No. GJK 1551/37105, submitted separately.

7. The F.D. may now be requested to agree to accord administrative approval to the fund.e for this scheme.

BB, DE.(I)

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8/5/51 9/5/51

49/5/51

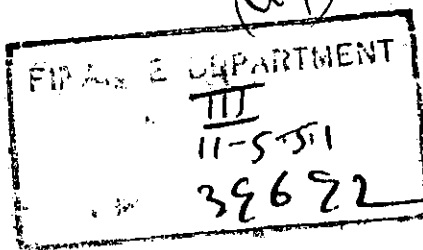
D.S.

Secy.

any special reduction of rate
to an industry would be in
the nature of a subsidy and
would be considered, on merits of
the case, by F.D. in consultⁿ with
F.D. 48.11.51

To me/

11
2/5/51



U.O. to the F.D. dt. 10th May 1951
(with file No. 2004/36 - I & its
accompan^ts.)

Finance Deptt. Br. III

Submitted with ref. to the O.N. of 13.2.51

2. Pl. see the remarks of the C.E., Bombay
Elec. Grid at p. 15-17 ante. In view of these
observations, this Deptt. need not object
now to accord administrative
approval to the plans and estimates
of Jaj. Karnataka Electricity scheme
Subject

Subject to the remarks that the excess
expr. over the current year's lend. grant
for the scheme in question should be
incurred ^{if necessary} ~~only~~ after the approval of the
same by this Dept.

SND
18.5.51

18/5
19/5

Thro: A. J. ...

LLS. (L. & D.)

SND
18/5/51

not to the P.W.D. & 21.5.51 Wk F.P. ✓

with 11.11.2
in ac.

K 23/5/51
23/5

P. W. D.
File No. GJK/551
Serial No. 44850

Shan New
23/5/51 K

23-5-51

R.W.D.

K.P.

Submitted with refce. to the ^{P 17-21} Gov. to the F.D. dated the 10-5-51.

2. The C.E., B.E.G. had sub^{P 1-5}mitted for administrative approval of Govt. a report with the p. and c. for the Jy. Power Utilization Scheme. He has also requested Govt. to take steps for the appointment of staff. The cost of the scheme is about Rs. 213.06. Please see the notes at p 1-4 ^{F 21-22}ante on the C.E. proposals. The F.D. has agreed to the proposal made by this Deptt.

3. Administrative approval may be accorded as per draft ^{P 13-15}put up for approval.

thru E.B. & P.B.

* to place para 3 of the draft

K.D.S. 15/6/51

HL

19ms 15/6/51

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15/6/51

D.S.

15/6/51

16/6/51

June 18/51

At submit Secy x to H.M., P.W.D. 16/6/51 X 16/6

GJK 1551
58378

P. 600

K. Ba 11-17-19 cfs
Submitted for information.
Record.

~~10/7/51~~

19/1/5

file
10/7/52

SS.

Bombay Electric Grid:
Entertainment of establishment
for the Jog-Karnatak Electric
Grid Scheme.

GOVERNMENT OF BOMBAY.
Public Works Department.
Resolution No.1184/48:
Bombay Castle (Bombay No.1)
2nd January 1951.

Read letter No.E.229/11552, dated 26th May, 1950, from
the Electrical Commissioner with the Government of Bombay.

RESOLUTION.- Government is pleased to sanction the
creation of one Division with headquarters at Hubli, and
four Sub-Divisions (one Electrical and Mechanical with head-
quarters at Hubli, and three Civil Sub-Divisions), for the
work of construction of technical and residential buildings,
transmission lines and sub-stations in connection with the
Jog-Karnatak Electric Grid Scheme.

2. For the Division and the Sub-Divisions, sanctioned
in paragraph 1 above, the following establishment is sanc-
tioned, in addition to the posts of 1 Assistant Engineer
(Civil) and 2 Junior Engineers (Civil), one Junior clerk
and two inferior servants, sanctioned in Government Resolu-
tion No.1184/48, dated 1st February 1950:-

For the Division.

<u>Post.</u>	<u>Scale of pay.</u> Rs.
1 Executive Engineer (Civil).	500-30-650-E.B.-45-1,100.
1 Junior Engineer (Civil).	80-5-100-8-140-E.B.-10-220- E.B.-10-270.
1 Junior Engineer (Electrical and Mechanical).	80-5-100-8-140-E.B.-10-220- E.B.-10-270.
1 Draftsman (Civil).	100-4-120-5-170; or 110-10-180
2 Assistant Draftsmen (Civil)	70-3-85-4-125; or 70-5-130.
1 Tracer.	46-3-85-E.B.-4-105.
1 Computer.	46-3-85-E.B.-4-105.
1 Divisional Accountant.	130-10-250-15-355.
1 Head Clerk.	140-10-190.
1 Senior Accounts Clerk.	100-3-140-10-150.
5 Senior Clerks.	92-8-140.
7 Junior Clerks.	46-3-85-E.B.-4-105.
1 Store-keeper.	70-5-100-8-140-10-150.
1 Daftary.	35-1-50.
1 Naik.	35-1-45.
7 Peons.	30-1/2-35.
1 Chowkidar.	30-1/2-35.

For the.....

For the Sub-Divisions.

<u>Post.</u>	<u>Scale of pay.</u> Rs.
1 Assistant Engineer (Electrical and Mechanical).	220-15-400-E.B.-20-500-E.B.-25-650.
2 Assistant Engineers (Civil).	
3 Junior Engineers (Electrical and Mechanical).	80-5-100-8-140-E.B.-10-220-E.B.-10-270.
7 Junior Engineers (Civil).	
3 Assistant Draftsmen (Civil)	70-3-85-4-125; or 70-5-130.
1 Assistant Draftsman (Electrical and Mechanical).	70-3-85-4-125; or 70-5-130.
4 Sub-Divisional Clerks.	92-8-140.
1 Clerks.	46-3-85-E.B.-4-105.
1/4 Inferior Servants.	30-1/2-35.

3. The posts of one Executive Engineer and 3 Assistant Engineers are sanctioned for a period of 5 years and the non-gazetted establishment for a period of 3 years in the first instance.

4. The establishment sanctioned in paragraph 2 above should be permitted to participate in the Contributory Provident Fund and should be granted the other allowances which have been allowed to similar establishment of the Bombay Electric Grid on mofussil scales of pay.

5. The posts should be filled in as and when actually required.

6. The expenditure involved on account of the establishment should be debited to the head "22-A - Other Revenue Expenditure connected with Electricity Schemes - Post-War Reconstruction and Development Programme". The Electrical Commissioner should be requested to forward, early in February 1951, the necessary supplementary demand statements for the funds actually required during the current year as per instructions issued in Government Circular Memorandum No.P.50/517, dated 26th January 1949.

By order of the Governor of Bombay,

K.V. JOGLEKAR,
Deputy Secretary to Government.

To

The Finance Department,
The Political and Services Department,
The Accountant General, Bombay
(through the Finance Department),

The Chief.....

-: 3 :-

The Chief Engineer, Public Works Department,
The Superintending Engineers of Circles,
The Electrical Commissioner
with the Government of Bombay,
The Public Health Engineer to Government,
The Electrical Engineer to Government.

--

No.

of 1951.

Copy forwarded for information and guidance to -

BAK
2/1/51.

12
Jog-Karnatak Elec.Grid Schemes.

GOVERNMENT OF BOMBAY.
Public Works Department.
Resolution No.GJK 1551.
Bombay Castle (Bombay No.1),
June 1951.

18th ✓
Govt. letter No.2004/36-V-E1, dated the 29th July, 1949 to the Elec. Commer. with the Govt. of Bombay. Letter No.T8/1/24822, dated the 18th October 1950 from the Elec.Commr. with the Govt.of Bombay as under :-
(ENTER).

RESOLUTION:- The Jog-Karnatak Elec.Grid Scheme estimated to cost Rs.213.06 lakhs, as shown below, is approved administratively.

	Estimates cost in lakhs of Rupees.
1. Surveys.	1.51
2. Transmission line.	86.89
3. Sub-Stations.	64.16
4. Civil Engineering Works.	26.11
5. Rural Distribution.	27.41
6. Interest during construction.	6.98

Total:	213.06

2. The cost of the Scheme is debitable to the head

"81-A Capital Outlay on Ely.Schemes". *Expenditure on the current year should not be allowed to exceed the budget grant of Rs. 45,05,400 without prior sanction of Govt.*

3. Orders regarding the appointment of necessary staff have been issued already under Government Resolution No.1184/48 dated the 2nd January 1951.

By Order etc.

Dy. Secy. to Govt.

To
the F.D.,
the D.D.,
the R.D.,
the L.S.G. & P.H.D.,
the C.E., B.E.G.,
the Collector of North Kanara,
the Collector of Dharwar,
the Collector of Bijapur,
the S.E., S.C.,
the Elec.Engr. to Govt.,
the Ex.Engr., S.El.Dn.,
the Ex.Engr., Kanara Dn.,
the Ex.Engr., Bijapur Dn.,
the Ex.Engr., Dharwar Dn.,
the A.G., Bombay (through F.D.).

Government of Bombay.
Public Works Department.
Resolution No.GJK.1551.
Bombay Castle (Bombay No.1),
18th June 1951.

Government Letter No.2004/36-V-E1, dated the 29th July 1949 to the Electrical Commissioner with the Government of Bombay.

Letter No.T8/1/24822, dated the 18th October 1950 from the Electrical Commissioner with the Government of Bombay as under:-

"Reference:-Government Letter No.2004/36-V-E1 dated 29th July 1949.

With reference to the above letter I submit herewith a report with plans and estimates, on the Jog-Karnatak Electric Grid Scheme, for the distribution of 10,000 KW at 110 KV busbars at Jog and 1,500 KW at Harihar, which the Mysore Government have agreed to supply to Bombay Government.

2. The scheme consists of two sections. The Jog-Hubli section has a main 110 KV transmission line which connects the Mahatma Gandhi Power House at Jog, through a switching station at Kavalvad, with the main 110 KV substations at Dandeli and Hubli. At Sirsi this main line is tapped and energy is stepped down to 11 KV to meet the demands of Sirsi and Hanagal. At Hubli the voltage is stepped down to 33 KV and 11 KV. Power is transmitted to Gadag at 33KV and to Dharwar at 11 KV. It is distributed in Hubli at 11 KV.

The Harihar-Haveri section consists of a 66/33 KV substation at Harihar and a 33 KV transmission line connecting Harihar with Ranibennur and Byadgi; at Byadgi the voltage is stepped down to 11 KV for power supply to Haveri.

Besides supplying power to the townships mentioned above it is also proposed to supply rural loads to the extent of 1,000 KW around Hanagal and Ranibennur - Haveri areas.

3. The total estimated cost of the scheme is about Rs.213.06 lakhs which is made up as follows:

(a) Surveys.	Rs.1.51	lakhs.
(b) Transmission lines	" 86.89	"
(c) Substations	" 64.16	"
(d) Civil Engineering Works	" 26.11	"
(e) Rural Distribution	" 27.41	"
(f) Interest During Construction	" 6.98	"
(g) Total....	Rs.213.06	lakhs.

Only lump sum provision has been made for rural distribution but a revised proposal will be sent to Government as mentioned in the report when the load survey of the Hanagal and Ranibennur - Haveri areas are completed.

4. The report presented herewith differs in many respects from the Fourth Note on the utilization of Jog Power submitted vide this office No.H8/6116 dated 14th April 1949. The changes were necessitated as additional data on the prospective loads was collected in the intervening period. The main omissions are the Lift irrigation pumping loads along the Tungabhadra river and the Water Supply Pumping load at Nirsagar. The additions are the rural loads at Hanagal and Ranibennur-Haveri areas. Regarding cost also, the prices adopted in the estimates are the latest available with suitable alteration where considered necessary. The rates proposed to the consumers also differ from those proposed in the Fourth Note but are lower than the rates, recently approved by Government for the North Gujarat Scheme. The rates are kept uniform for both the Jog and Harihar sections notwithstanding the appreciable difference in.....

in the Mysore Government's supply rates at the two places. The actual tariffs will be framed and submitted to Government for approval when the scheme is nearing completion and actual costs are more or less known.

5. As regards the instructions in Government Letter No.2004/36-V-EL, dated 29th July 1949, I have to state as follows:

(i) The rate of supply to the Aluminium industry is refixed provisionally at 0.4 an/unit after taking into consideration the cost of power upto the point of location of the industry.

(ii) Electricity duty is not taken into account while preparing the financial forecast of the scheme. The receipts on account of duty, will be an additional revenue to Government.

(iii) Details regarding the capital cost, rate of interest, depreciation, and Operation and Maintenance charges will be found in the report.

6. It was not possible to submit the report earlier because the entire work on this scheme has had to be done only by a limited staff. The Executive Engineer for the scheme is still not appointed and even for the Assistant Engineer I have only made an officiating appointment of a Junior Engineer.

7. I recommend that Government may be pleased to approve the scheme administratively at an early date and to take immediate steps for the appointment of the required gazetted staff."

RESOLUTION: The Jog-Karnatak Electric Grid Scheme estimated to cost Rs.213.06 lakhs, as shown below, is approved administratively.

	Estimated cost in lakhs of Rupees.
1. Surveys.	1.51
2. Transmission line.	86.89
3. Sub-Stations.	64.16
4. Civil Engineering Works.	26.11
5. Rural Distribution.	27.41
6. Interest during construction.	6.98
Total...	213.06

2. The cost of the Scheme is debitable to the head "81-A Capital Outlay on Electricity Schemes". Expenditure in the current year should not be allowed to exceed the budget grant of Rs.45,05,400 without prior sanction of Government.

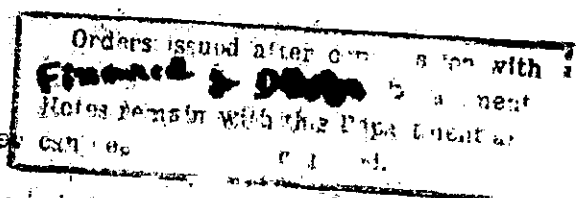
3. Orders regarding the appointment of necessary staff have been issued already under Government Resolution No.1184/48 dated the 2nd January 1951.

By order of the Governor of Bombay,

K. V. Joglekar.
Deputy Secretary to Government.

To

- The Finance Department.
- The Development Department.
- The Revenue Department.
- The Local Self Government and Public Health Department.
- The Chief Engineer, Bombay Electric Grid.
- The Collector of North Kanara,
- The Collector of Dharwar.
- The Collector of Bijapur,
- The Superintending Engineer, Southern Circle.
- The Electrical Engineer to Government.
- The Executive Engineer, Southern Electric Division.
- The Executive Engineer, Kanara Division.
- The Executive Engineer, Bijapur Division.
- The Executive Engineer, Dharwar Division.
- The Accountant General, Bombay (through the Finance Department)



Vsm/18.6.51

ISSUED

17
Letter.

No.T.8/C-12 1950-3
Electric Grid Offices,
Mercantile Bank Building, Fort,
Bombay 1: 4 July 1951.

To

The Postmaster General,
Bombay.

Subject :- Separate telephone line along
the 110 kV transmission line for
Jog-Karnatak Scheme.

Reference:- Your letter No.ENX-362/4 dated
31-5-51.

Dear Sir,

I acknowledge with thanks the receipt of your above letter and note that the estimated cost of the proposed telephone line from Jog to Hubli and Dandeli a distance of about 122 miles is Rs. 2,35,000. I note that this is only an approximate figure and that the amount to be finally paid by this department would depend on the actual cost of the work on the basis of prices of materials and labour at the time of construction. Only for about 44 miles the detailed surveys of the route of the transmission line have been completed and it will take some time more probably till December next for the completion of the survey of the balance portion of the line. The more important details of the surveys will be forwarded to you as soon as they are completed.

The telephone line route will have to run as far as possible parallel to the power line at a distance of about 800 ft. as already intimated in my letter No.T.8/S-5/9870 dated 7-4-51. But based on the final survey and if you consider any alterations necessary or desirable they could be adopted, taking into consideration the operation and maintenance requirements of this department.

In regard to the other points mentioned in para 3 of your letter, I would state that this department would arrange for the jungle clearance required for the erection of the telephone line if this work cannot be undertaken by your department. But the work of transport and distribution to site of the stores required for the telephone line has to be arranged by your department.

I note that you expect the telephone line work to be completed within two months of receipt of stores. Instead of waiting to obtain the stores after the route is finally fixed it will be advantageous to place indent even now for the standard materials required for this line ordering later only those special materials required for special crossings and locations. This would obviate much delay.

Government have administratively approved the scheme and necessary provision has been made in the estimates for the construction of the separate telephone line under reference. You may, please, enter our order for construction, by your department, of the Jog-Hubli-Dandeli telephone line along with the 110 kV transmission line route of the Jog-Karnatak Electric Grid Scheme. I expect the expenditure will be debited to this department on completion of the work. Please let us know at an early date what provision has to be made in our budget estimate of 1952-53 for this work.

Please

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-2-

Please acknowledge the receipt of this letter and let us know what action you propose to take in ordering the necessary materials and also regarding the points raised in this letter.

Yours faithfully,

T. J. Michaelson
37/57.
Chief Engineer.

✓ Copy forwarded with compliments to the Secretary to Government, Public Works Department, Bombay.

A provision of Rs.2.44 lakhs has been made in the estimates administratively approved by Government, vide G.R.No.GJK 1551 dated 18-6-1951.

15-16

1sb/2.7.

Copy to Accountant General, Bombay